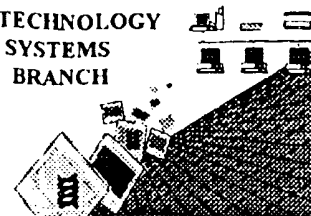


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/911,826A
Source: 1600
Date Processed by STIC: 7/31/2003

RECEIVED
AUG 11 2003
TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202



1600

RAW SEQUENCE LISTING

DATE: 07/31/2003

PATENT APPLICATION: US/09/911,826A

TIME: 15:09:31

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\07312003\I911826A.raw

3 <110> APPLICANT: ROTIN, Daniela
 4 PHAM, Nam
 6 <120> TITLE OF INVENTION: RAS Activator Nucleic Acid Molecules, Polypeptides and
 7 Methods of Use
 9 <130> FILE REFERENCE: DWW-5001-US
 11 <140> CURRENT APPLICATION NUMBER: 09/911,826A
 C--> 12 <141> CURRENT FILING DATE: 2001-07-20
 14 <150> PRIOR APPLICATION NUMBER: 2,259,830
 15 <151> PRIOR FILING DATE: 1999-01-20
 17 <160> NUMBER OF SEQ ID NOS: 28
 19 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

Group: Empty
 Name: Nucleo

pp 1-4

1554 <210> SEQ ID NO: 28
 1556 <211> LENGTH: 149
 1558 <212> TYPE: PRT
 1560 <213> ORGANISM: Mus musculus
 1564 <400> SEQUENCE: 28
 1566 Gly Gly Lys Asp Val Ser Ala Glu Ala Glu Ser Ser Ser Met Val Pro
 1567 1 5 10 15
 1570 Val Thr Thr Glu Glu Ala Lys Pro Val Pro Met Pro Ala His Ile Ala
 1571 20 25 30
 1574 Val Thr Pro Ser Thr Thr Lys Gly Leu Ile Ala Arg Lys Glu Gly Arg
 1575 35 40 45
 1578 Tyr Arg Glu Pro Pro Pro Thr Pro Pro Gly Tyr Val Gly Ile Pro Ile
 1579 50 55 60
 1582 Ala Asp Phe Pro Glu Gly Pro Cys His Pro Ala Arg Lys Pro Pro Asp
 1583 65 70 75 80
 1586 Tyr Asn Val Ala Leu Gln Arg Ser Arg Met Val Ala Arg Pro Thr Glu
 1587 85 90 95
 1590 Ala Pro Ala Pro Gly Gln Thr Pro Pro Ala Ala Ala Ala Ser Arg Pro
 1591 100 105 110
 1594 Gly Ser Lys Pro Gln Trp His Lys Pro Ser Asp Ala Asp Pro Arg Leu
 1595 115 120 125
 1598 Ala Pro Phe Gln Ala Gly Phe Ala Gly Ala Glu Glu Asp Glu Asp Glu
 1599 130 135 140
 1602 Gln Val Ser Ala Val
 1603 145
 E--> 1604 1
 E--> 1606 29

delete

see pp 2-3 for more errors

09/911, 826A

2

<210> 4
<211> 286
<212> PRT
<213> Homo sapiens

<400> 4

Thr Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val Ala Ala Leu
1 5 10 15

Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ser Gly Gly Lys Asp
20 25 30

Val Ser Ala Glu Ala Glu Ser Ser Ser Met Val Pro Val Thr Thr Glu
35 40 45

Glu Ala Lys Pro Val Pro Met Pro Ala His Ile Ala Val Thr Pro Ser
50 55 60

Thr Thr Lys Gly Leu Ile Ala Arg Lys Glu Gly Arg Tyr Arg Glu Pro
65 70 75 80

Pro Pro Thr Pro Pro Gly Tyr Val Gly Ile Pro Ile Ala Asp Phe Pro
85 90 95

Glu Gly Pro Cys His Pro Ala Arg Lys Pro Pro Asp Tyr Asn Val Ala
100 105 110

Leu Gln Arg Ser Arg Met Val Ala Arg Pro Thr Glu Ala Pro Ala Pro
115 120 125

Gly Gln Thr Pro Pro Ala Ala Ala Ser Arg Pro Gly Ser Lys Pro
130 135 140

Gln Trp His Lys Pro Ser Asp Ala Asp Pro Arg Leu Ala Pro Phe Gln
145 150 155 160

Ala Ala Ser His Ser Gly Thr Ser Pro Ala Thr Gln Thr His Ala Ser
165 170 175

Arg Pro Ser Arg Gln Ala Ser Gln Glu Arg Arg Arg Thr Lys Met Asn
180 185 190

Lys Cys Leu Leu Phe Glu Ala Gln Ala Pro (Xaa) Ser Thr Val Ser His
195 200 205

Pro Lys Glu Ser Thr Arg Arg Arg Pro Lys Pro Trp Ser Leu Gly Thr
210 215 220

His Ile (Xaa) Gly Trp Trp Thr Ser Leu Pro Pro Ser Leu Pro (Xaa) Ser
225 230 235 240

Ser Met Gly Leu Leu Leu Pro Phe Phe Leu Ser Pro Leu His Val Lys
245 250 255

Tyr Cys Glu Glu Ile Ala Leu Ala Leu Cys Arg Leu Val Ala (Xaa) Asn
260 265 270

See p. 4
for error
explanation

09/911826A 3

Ala Gln Pro Ser Ser Pro (Xaa) Ala Ala Ala Cys His Val Thr
275 280 285

sep 4

4

VARIABLE LOCATION SUMMARY

PATENT APPLICATION: US/09/911,826A

DATE: 07/31/2003

TIME: 15:09:32

err? explanation

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\07312003\I911826A.raw

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:4; Xaa Pos. 203,227,239,271,279

Seq#:5; Xaa Pos. 16,18,45,59,61,151,166,215

Seq#:6; Xaa Pos. 1,35,123,178,239

Seq#:15; Xaa Pos. 50

*These sequences are errored, too.
no Xaa explanations*

VERIFICATION SUMMARY

DATE: 07/31/2003

PATENT APPLICATION: US/09/911,826A

TIME: 15:09:32

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\07312003\I911826A.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:407 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:1236 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:15
L:1236 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:15
L:1236 M:341 W: (45) "n" or "Xaa" used, for SEQ ID#:15 after pos.:48
L:1604 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:28
M:332 Repeated in SeqNo=28